

What is claimed is:

1. A method for detecting agglomerates in a mixed phase container by measuring strain in a detecting rod  
5 disposed in said mixed phase container in which a mixed phase of gas and powders such as products of the olefin polymer and/or catalysts is formed, wherein said detecting rod is disposed at an insertion angle in the range from 20 degrees to 70 degrees with relation to the flow of gas and  
10 powders.

2. A method for detecting agglomerates according to claim 1, wherein the detecting rod is disposed horizontally at an insertion angle in the range from 20  
15 degrees to 70 degrees with relation to the flow of gas and powders.

3. A method for detecting agglomerates according to claim 1, wherein a distributor plate is disposed on the  
20 bottom of said mixed phase container for diffusing the gas in a horizontal direction, and said detecting rod is positioned at a predetermined height above said distributor plate.

25 4. An apparatus for detecting agglomerates in a mixed phase container by strain detecting means in a detecting rod disposed in the mixed phase container in which a mixed phase of gas and powders is formed, wherein said

detecting rod is disposed at an insertion angle in the range from 20 degrees to 70 degrees with relation to the flow of gas and powders.

5                    5. An apparatus for detecting agglomerates according to claim 4, wherein said detecting rod is disposed horizontally at an insertion angle in the range from 20 degrees to 70 degrees with relation to the flow of gas and powders.

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6. An apparatus for detecting agglomerates according to claim 4, wherein a distributor plate is disposed on the bottom of said mixed phase container for diffusing the gas in a horizontal direction, and said  
15 detecting rod is positioned at a predetermined height above said distributor plate.

7. A fluidized-bed olefin polymerization reactor wherein a mixed phase of gas and powders is formed, said  
20 reactor comprising an apparatus for detecting agglomerates in said mixed phase, said apparatus having a detecting rod for measuring strain when said agglomerates collide thereto, wherein said detecting rod is disposed at an insertion angle in the range from 20 degrees to 70 degrees with relation to  
25 the flow of gas and powders.

8. A fluidized-bed olefin polymerization reactor according to claim 7, wherein the detecting rod is disposed

horizontally at an insertion angle in the range from 20 degrees to 70 degrees with relation to the flow of gas and powders.

5           9. A fluidized-bed olefin polymerization reactor according to claim 7, wherein a distributor plate is disposed on the bottom of said mixed phase container for diffusing the gas in a horizontal direction, and said detecting rod is positioned at a predetermined height above  
10 said distributor plate.

10. An olefin polymerization method, comprising:  
detecting agglomerates in a mixed phase container by measuring strain in a detecting rod disposed in said  
15 mixed phase container in which a mixed phase of gas and powders is formed, wherein said detecting rod is disposed at an insertion angle in the range from 20 degrees to 70 degrees with relation to the flow of gas and powders; and  
removing said agglomerates from said mixed phase  
20 container.

11. An olefin polymerization method according to claim 10, wherein the detecting rod is disposed horizontally at an insertion angle in the range from 20 degrees to 70  
25 degrees with relation to the flow of gas and powders.

12. An olefin polymerization method, according to claim 10, wherein a distributor plate is disposed on the

bottom of said mixed phase container for diffusing the gas in a horizontal direction, and said detecting rod is positioned at a predetermined height above said distributor plate.

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13. A method for manufacturing an olefin polymer, said method comprising:

detecting agglomerates in a mixed phase container by measuring strain in a detecting rod disposed in said  
10 mixed phase container in which a mixed phase of gas and powders is formed, wherein said detecting rod is disposed at an insertion angle in the range from 20 degrees to 70 degrees with relation to the flow of the gas and powders;  
and

15 removing said agglomerates from said mixed phase container.

14. A method for manufacturing an olefin polymer according to claim 13, wherein the detecting rod is disposed  
20 horizontally at an insertion angle in the range from 20 degrees to 70 degrees with relation to the flow of gas and powders.

15. A method for manufacturing an olefin polymer  
25 according to claim 13, wherein a distributor plate is disposed on the bottom of said mixed phase container for diffusing the gas in a horizontal direction, and said detecting rod is positioned at a predetermined height above

said distributor plate.

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